

## **CLAIMS**

1. A method of increasing healing of a heart wound in a mammal, comprising the step of administering to a mammal in need thereof an effective amount of a thyroid hormone-lowering agent, whereby healing of a heart wound in the mammal is increased relative to healing of a heart wound in a mammal to whom the thyroid hormone-lowering agent has not been administered.
2. The method of claim 1 wherein the thyroid hormone-lowering agent is propylthiouracil.
3. The method of claim 1 wherein the thyroid hormone-lowering agent is methimazole.
4. The method of claim 1 wherein the thyroid hormone-lowering agent is carbamazole.
5. The method of claim 1 wherein the thyroid hormone-lowering agent is radiolabeled iodide.
6. The method of claim 1 wherein the thyroid hormone-lowering agent is a ribozyme.
7. The method of claim 6 wherein the ribozyme specifically binds to an mRNA molecule encoding thyroglobulin.
8. The method of claim 6 wherein the ribozyme specifically binds to an mRNA molecule encoding thyroid stimulating hormone.
9. The method of claim 1 wherein the thyroid hormone-lowering agent is an antisense oligonucleotide.
10. The method of claim 9 wherein the antisense oligonucleotide specifically binds to an mRNA molecule encoding thyroglobulin.
11. The method of claim 9 wherein the antisense oligonucleotide specifically binds to an mRNA molecule encoding thyroid stimulating hormone.
12. The method of claim 1 wherein the thyroid hormone-lowering agent is an antibody.
13. The method of claim 12 wherein the antibody specifically binds to thyroglobulin.

14. The method of claim 12 wherein the antibody specifically binds to thyroid stimulating hormone.

15. The method of claim 1 wherein the mammal is a C57Bl/6 mouse.

16. The method of claim 1 wherein the mammal is a human.

5 17. The method of claim 1 wherein the increased healing in the mammal comprises re-epithelialization.

18. The method of claim 1 wherein the thyroid hormone lowering agent decreases T3 levels.

10 19. The method of claim 1 wherein the thyroid hormone lowering agent decreases T4 levels.

20. The method of claim 1 wherein the thyroid hormone lowering agent is administered prior to wounding.

21. The method of claim 1 wherein the thyroid hormone lowering agent is administered after wounding.

15 22. The method of claim 1 wherein the thyroid hormone lowering agent is administered concomitant with wounding.

23. The method of claim 1 wherein the heart wound is selected from the group consisting of an ischemic infarct, a surgical incision, a cut, an abrasion, a tissue punch, a crush, a burn, a tear, a puncture, and a cold-induced lesion.

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